

topaz vibe

» Rigging Instructions



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// introduction

These RIGGING INSTRUCTIONS have been compiled to help you to rig your Topaz VIBE sailing dinghy. Please also ensure that you refer to your TOPAZ OWNERS MANUAL.

The OWNERS MANUAL has been compiled to help you to operate your craft with safety and enjoyment. It contains details of the craft, the equipment supplied or fitted, it's systems and information on its operation and maintenance. Please read it carefully and familiarise yourself with the craft before using it.

If this is your first craft, or you are changing to a type of craft you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before assuming command of the craft. Your dealer or national sailing federation or yacht club will be pleased to advise you of local sea schools, or competent instructors.

PLEASE KEEP THE RIGGING INSTRUCTIONS AND THE OWNERS MANUAL IN A SECURE PLACE AND HAND THEM OVER TO THE NEW OWNER WHEN YOU SELL THE CRAFT.

For further information, spares and accessories, please contact the manufacturer:

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The Topaz VIBE is designed to require very little maintenance, but there are some simple ways to keep your boat in the best condition.

Mainsheet

Tie a figure of eight knot in the mainsheet at a point which will prevent the boom hitting the shrouds.

Rudder

Never launch your boat without checking that the retaining clip has clicked into place beneath the upper transom fitting.

Sails

After sailing, roll the mainsail loosely. Never fold Mylar sailcloth. Never let the sails flap unduly. Do not hoist the jib till just before launching. If you have the optional furler kit fitted, furl the jib as soon as you hoist it (even in light airs). Try to get into the habit of furling it while launching and recovering the boat, between races and when you capsize in windy conditions!

The mainsail is protected to some extent by the full-length battens which stop it flapping but you should never leave it hoisted for extended periods on the shore. Be as gentle as you can with the asymmetric. Drops have to be fast but if the crew can pull smoothly the sail will last longer. You should also keep an eye on the halyard cleat: really strong (or unobservant) crews have been known to pull the patches out of cleated kites... Avoid trawls - the helmsman can help if necessary by taking the sheet on the drop. Bearing away a little also makes the pull easier.

Always rinse the sails and boat after sailing in salt water.

Remove the gennaker from the boat after sailing - mice have a taste for gennakers left in boats! If you must leave it in the chute overnight make sure that the corners are flat (i.e. not folded or crushed). Always dry the gennaker flat (not flapping in the wind!) before folding it.

ALWAYS RELEASE JIB TENSION WHEN NOT SAILING

Foils

Repair any nicks or deep scratches on the rudder with gelcoat filler. Even the slightest damage to the shape or surface of the foils will affect their performance. If your boat vibrates or hums it is usually due to minor damage to the foils. Make sure that the rudder blade remains tight in the stock when down. Any play between the blade and stock, or between the stock and the hull, may cause steering problems.

Hull and fittings

Small dents can be repaired by gently warming the hull with a hot air blower (take care not to melt the hull). For any more substantial repairs refer to Topper Sailboats.

Check the attachment of all fittings regularly. This is particularly important for the fittings that are screwed onto fixings that are set in the hull. Keep all blocks, cleats and ropes clean and rinse them after salt water exposure.

Always remove the bung to empty any water after sailing, and when not sailing leave the bung out to prevent the build-up of pressure within the hull as the temperature fluctuates.

Ropes

Replace any ropes showing signs of wear immediately. Too many championships have been lost by failing to replace a damaged rope when it was first noticed.

// glossary / useful terminology

hull

Nose: Front of the hull

Painter: Rope from the nose of the hull used for towing or tying the board to a jetty, buoy or trolley

Transom: Back of the hull

Fore: Forward

Aft: Rearward

Mast Step: Integral tube where the mast heel/foot of the mast locates

Rail: Upper/outermost edge of a hull

Port: Left side of the hull when looking forward

Starboard: Right side of the hull when looking forward

Leeward: Direction away from the wind

Windward: Direction from which the wind is coming

Gudgeon: Fitting on the transom used to hang the rudder

spars

Mast: Main vertical spar supporting the rig/sail

Mast Heel: Lower edge/foot of the mast

Boom: Spar at the bottom of the mainsail

Outhaul: Purchase system on the boom for tightening the lower edge/foot of the sail

Vang:Purchase system for tightening the rear/aft edge (leech) of the sailCunningham:Purchase system for tightening the forward edge/luff of the sail

Sheet: Rope for controlling the inward/outward position of the mainsail

foils

Daggerboard Blade found in the middle of the hull used to counteract leeward slippage

Rudder: Blade found at the transom used for steering

Pintle: The male part (pin) of the rudder hanging system

// glossary / useful terminology (...)

sails

Mainsail: Sail aft/rearward of the mast (Larger of the two)

Jib: Sail forward of the mast (Smaller of the two)

Tack: Forward lower corner of a sail

Clew: Rear lower corner of a sail

Head: Upper corner of sail

Leach: Rear edge of the sail

Luff: Forward edge of the sail

Bottom edge of the sail

Batten: A thin stiffening strip in the sail to support the leach

// rigging instructions

raising the mast



Position the boat head to wind away from any overhead power lines or other obstructions.

Lay the mast along the centre line of the boat.



Untape all the ropes attached to the foot of mast. Attach shroud adjusters to the shroud eye each side - approximately the 7th hole down (approximately the middle of the adjuster). Subsequently, you can attach at the captive pin on the base of the plate.



Fix the base of the mast to the mast step on the cross beam with the pin and ring from the mast step.

Ensure all halyards are in place at foot of mast. You may now pull the mast up using the forestay. You may require someone to lift the top of the mast.



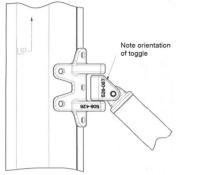
Having pulled the mast upright secure the forestay to the eye on the black bar at the chute mouth. Leave a long tail.

Ensure all halyards from mast are clear and not twisted or snagged.

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attaching the boom & gnav





Attach the boom onto the mast with the pin on the lower of the two fittings. Remember to put the pin in from the top and flip the pin end over.

Next attach the strut to the upper fitting on the mast. Ensure the toggle is correctly orientated.

WARNING It is VITAL that the GNAV toggle is assembled as shown in the diagram (bottom left).

Failure to do this will result in damage to the Strut Assembly.



Fix the gnav strut to the carriage on the top of the boom. The carriage should already be fixed to the boom for you.



Having fixed the boom and gnav to the mast, thread the gnav control line from the fitting at the front of the boom through the cleat on the mast.



Attach main halyard to end of boom.

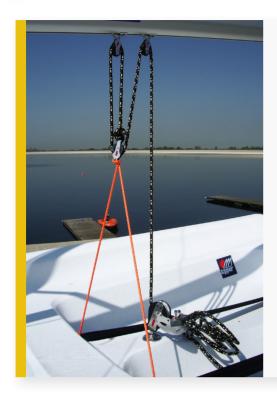
TIP: You can tie a stopper knot in halyard by the mast to support the boom while you rig.

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attaching the boom & gnav (...)



The mainsheet can now be threaded.

Starting from the centre cleat round the ratchet block (remember to check it clicks when the rope is pulled in), feed up to the rear block on the underside of the boom going, through block running from the back to the front, then down to the block on the rope strop, then up to front block on underside of boom, through block going front to back this time, then back down to tie off with a figure-eight knot onto the top of the block on the rope strop.

raising the jib



Then attach the foot of the jib to the eye at the front of the boat using the tail of the forestay.





Attach jib head to the shackle on jib halyard. Pin downward.

raising the jib (...)



Lock the jib hanks onto the forestay, by inserting and twisting. Then, continue to feed the jib hanks onto the forestay.

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Make sure you are still head to wind. Raise the jib by pulling the halyard and cleating off at the base of the mast.



Attach the jib sheets to the clew of the jib with stopknot.

TIP: The neatest way to do this is to find the centre of the jib sheet and push a small loop of it through the clew cringle. Pass both the tails through this loop and pull tight. If you tie the ends together with a fisherman's knot the crew will always be able to release the jib sheet. This hitch is small and will therefore slip around the jib luff easily when gybing. Remember to thread the sheets through the cleats and fairleads.

Take jib halyard tail and stow in tidy bag on top of gennaker sock.

TIP: It is not advisable to leave jib up overnight.

REMEMBER TO TAKE THE JIB TENSION OFF WHEN NOT BEING SAILED.

rigging the gennaker kit



The gennaker halyard is entirely external to the mast. One end ties to the head (top) of the sail then passes through the top pulley block on the mast and to the small block on the beam.

Thread the tail down through the block on the bottom front of the beam.

rigging the gennaker kit (...)



Then forward, around the free block located to the side of the gennaker chute (attached to the line that pulls the pole out).

Then back to the spinlock cleat on the port side of the mast.



Lead the end down through the block at the front of the centerboard case. Round the back first (i.e., feed forward from the back of block).



Then through the eyelet at the back of the sock. Feed it up the sock to the mouth of the chute.

TIP: Remove a batten from the mainsail and feed this through the sock and use this to pull the halyard through. Tie it off so you do not lose it!



The tack line emerges from the forward end of the bowsprit. Tie a figure-of-eight knot about 6in /15cm from the end of this line and an overhand knot right at the end.

Pull the pole right out: the easiest way to do this is to tie off the top end of the gennaker halyard and pull on the other end. This should launch the pole by pulling the single block back down the boat. Ensure that the pole is right out. The lines should be pre-set to the correct position - i.e. the pole goes right out; when it is out the figure-of-eight knot in the tack line is pulled right to the end of the pole.

If you need to adjust any of these remember that they are all interdependent. So moving one will affect the others. For instance, moving the knot which attaches the aft end of the tack line to the deck-eye on the beam of the boat in front of the mast will affect how far the pole can go out and the distance from the tack of the sail to the pole end.

TIP: The rope may stretch initially, so you may need to adjust the knot after the first time you sail.

rigging the gennaker sail



Tape over all protruding fittings and fixings around the bow. The gennaker is a big sail and if it can catch on anything it will!

Pass the overhand knot at the end of the tack line (at the outer end of the pole) through the eye at the tack of the sail (marked "T") and tie a half-hitch, using the overhand knot as a stopper. Ensure that the sail is not twisted.



Follow the luff to the head of the gennaker (marked "H") and attach it to the top end of the gennaker halyard using a bowline. Pull the gennaker up the mast slightly to give yourself some slack in the downhaul.



Attach the sheets to the clew (marked "C") with stopknot.

TIP: The neatest way to do this is to find the centre of the gennaker sheet and push a small loop of it through the clew cringle. Pass both the tails through this loop and pull tight. If you tie the ends together with a fisherman's knot the crew will always be able to release the gennaker sheet. This hitch is small and will therefore slip around the jib luff easily when gybing. Remember to thread the sheets through auto ratchet in the correct direction.



Now you have all three corners of the gennaker tied on and you can attach the downhaul. This can be tricky - and embarrassing if you get it wrong - especially if you do not notice until the first hoist or even the first gybe! A good way to remember how to connect it is to make sure that the downhaul is always behind the tack line and in front of BOTH sheets. To collapse the gennaker neatly into a short sock when dropping, the Vibe utilizes a two-patch system: an eye near the foot and a webbing loop near the head.

Untie the downhaul from where it is tied off at the chute mouth.

(A) Pass the end through the eye in the bottom ring of the gennaker.

(B) Then put the bobble on the halyard before you tie the end of the gennaker downhaul to the webbing eye on the top patch using a bowline. This stops your bowline getting court in the middle ring. Remember to bring the downhaul out behind the tack and in front of both sheets.

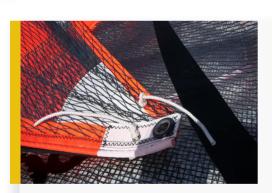
rigging the gennaker sail (...)



You should now be able to pull the gennaker down into the chute, ensuring that it does not snag around the poleend or under the bow.

TIP: When launching the gennaker. Pull gennaker halyard from block NOT direct from chute. This will prevent wear and tear at chute opening.

raising the mainsail



Check that the boat is head to wind and hoist the sail. Battens - The sail is supplied with all 4 battens inserted but they may not be fully tensioned. Ensure that the forward ends are properly bedded into the end-fittings. Use just enough tension to remove all the creases.

Masthead Float - Attach the float panel to the top of the sail securing the lines through the eyes in the sail with figure-eight knots.

TIP: Offset the sail to the port side of the boat to avoid jamming.



A good knot for tying the halyard to the head of the mainsail is a simple half-hitch with a stopper. This takes up less halyard than a bowline and fits snug to the headboard, allowing you to pull the sail right to the top of the mast (the luff bolt rope will stretch a little when you do this).

TIP: Use a ball on the end of the line. Make a loop, feed through the eye at the top of the sail then feed the ball through loop and tighten.

raising the mainsail (...)





Before raising the sail, insert the slug at the back of the sail into the track on the boom.

Take the control line from the sheave in the boom-end fitting, and feed through the eye in the sail and back through the pulley in the boom-end.

Then via the notch in the fitting underside, tie a small knot in end.



Check that the boat is still head to wind and hoist the sail.

Ensure that the luff is engaged in the feeder at the bottom of the track. It is easy to hoist the sail by pulling the halyard straight from its exit from the top of the mast, the halyard cleats off in the side entry cleat at the top of the mast.

TIP: Check the wear on the halyard regularly, particularly where it goes over the masthead sheave. You can prevent excessive wear by moving the knot at the head every so often by adding additional overhand knots further and further down the halyard. When you have done this a few times you will have to trim the excess knotted line to save windage.



The Tail is kept next to the mast by tucking the ball under the elastic loop at the base of the mast.

TIP: When sailing upwind you will nearly always have the outhaul pulled quite tight but you may wish to loosen it for the downwind legs. You can pre-set the "off" position by tying a large knot (or use a ball) about an inch from the cleat when the foot is pulled tight. This means you simply have to uncleat at the windward mark and it will be in about the right place for downwind sailing. Remember to pull it back on before rounding the leeward mark!

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raising the mainsail (...)



Cunningham - Take the tail attached to the gooseneck fitting and feed through eye in the sail then down through the cleat on the side of the mast. Secure this with a figure-eight knot.

reefing the mainsail

To reef the mainsail. Detach outhaul and cunningham, then lower mainsail so upper zip is in line with top of boom. Roll the sail from the bottom as tightly as possible. Then connect the zips to complete the reef.

Re-attach Cunningham. Slide reef slug back along top of boom end. Re-attach clew end fitting to outhaul.

TIP: Loosen outhaul at front of boom.

rudder



When the Rudder is attached ensure that it is fully engaged on to the pintle and gudgeon so that the retaining clip is able to spring out to hold the rudder in place.

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Upwind

For a medium wind (crew sitting out hard, but able to sheet the mainsail to the centreline) you should be able to use maximum power.

Use very little or no cunningham. The outhaul should be set so that there is about a 3in (7-8cm) gap between mainsail foot and boom at the point of maximum cord. Try to keep the boom on the centreline, provided that the boat remains flat

The jib can be eased about I-2in (5-10cm) from maximum tightness for optimum performance. As the wind increases, reduce the power in the mainsail by pulling down on the cunningham progressively until the boat feels comfortable and balanced again. If you have tell tales on the leech, use enough gnav to keep them flying.

For very windy conditions flatten the main by tightening the outhaul and tensioning the cunningham (with a fully-battened sail this has the effect of flattening the sail without pulling the fullness forward).

In light airs, use little or no gnav to allow the leech to open.

Tacking

Be aware that with a fully-battened sail the power comes on very fast after the tack. Do not over steer with the rudder as you will find yourself on a reach. Do not sheet in hard immediately, with either main or jib, until the boat has picked up speed after the tack. Whenever the boat slows down it pays to ease sheets, bear off a couple of degrees and then point up again once the boat has regained speed.

In light winds, when about to tack, make sure that there is some gnav tension, as this will help the battens to flick across. Ease the sheet a few inches before tacking. A sharp pull when you reach the new tack will also help the battens across.

Downwind

With an asymmetric spinnaker, large distances can be gained (and lost!) very quickly. It is essential to keep the boat travelling at the optimum speed and direction towards the next mark. This direction will vary according to the wind strength. In light airs, at displacement speeds, where sailing higher will not result in a great increase in speed, it pays to sail low towards the mark.

In marginal planing conditions, sailing higher will allow the boat to plane and the consequent increase in speed help to offset the extra distance travelled. The boat can be sailed progressively lower as the wind strength increases.

Just when to sail high or low and at what precise angles will come only with experience, so keep practising. The crew can have a better idea of the correct angle to sail by feeling the power in the spinnaker sheet. Allow the crew to call the pressure.

Sail as low as possible, keeping the pressure on, unless there are overriding tactical considerations.



Gybing

An asymmetric spinnaker is far easier to gybe than a conventional spinnaker and takes no longer than tacking. Ideally you should always gybe when the boat is travelling at maximum speed as there is less pressure on the sails. It therefore pays to gybe 'reach-torun'.

If you try to slow down and gybe 'run-to-run' the spinnaker pulls the top of the mast forward, making the boat unstable and less controllable. The additional air pressure will make the mainsail harder to pull across. So be positive and gybe smoothly and at speed.

In strong winds you will probably bear-away so that, although the apparent wind still shows a broad reach, you are in fact running directly before the true wind. If you then try to gybe through your normal angle you will gybe on to a reach and be overpowered!

So in strong conditions remember to gybe through a smaller angle.

As with tacking, apply some gnav tension and cunningham when gybing in light airs to help the battens flick across.

Boat Tips

- Do not step mast near any overhead cables.
- Tape all rigging pins and spreader ends, inboard and outboard.
- Put a figure of eight knot in the mainsheet so that the boom cannot hit the shrouds.
- Tighten all shackles, screws and bolts regularly.
- Ensure the rudder retaining device is in position.
- Ensure rudder is fully down when sailing.
- Never fold Mylar sails.
- Tape all fittings in and around the gennaker chute and don't leave any sharp edges.
- Never allow the jib to flap.
- Roll mainsail gently after use and leave battens in place.
- Ensure battens are located correctly in batten pockets.

Towing

When towing your Vibe ensure that it is securely strapped down with a strap over the middle and the bow strapped down to the road base. The launching trolley will lock into the road base at the axle with the front being held on with a lock pin on to the post.

Ensure the mast and all other equipment is securely fixed to the boat before towing. The road trailer should be secured to the towing vehicle with the wire safety loop as well as the ball hitch and be fitted with a rear lighting board to conform with local regulations.

topaz vibe





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Test sails available on request

